

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-2. (cancelled)

3. (Currently amended) ~~The image processing device according to claim 2,~~
An image processing device that reads an image signal from a solid-state image-pickup
element where a plurality of unit pixels including a transistor for detecting a light signal
and a photo diode are arranged in a matrix, the device comprising:

a first shift register connected to a line of the matrix for reading out an
image signal, the first shift register selecting a line where a signal in response to carriers
accumulated in an accumulation state for generating carriers in the photo diode in
response to received light is read out;

a second shift register connected to a line for clearing an image signal, the
second shift register selecting a line for clearing an image signal where residual carriers
in the solid-state image-pickup element are discharged from the solid-state image-
pickup element;

a first output circuit that outputs a reset signal to the first shift register
when a direction of scanning lines of the matrix is changed;

a second output circuit that outputs shift data applied to a line for reading out an image signal, based on which a selection signal for selecting a line for reading out an image signal is output, to the first shift register, when a number of lines between the line for reading out an image signal and the line for clearing an image signal is equal to or less than a total number of lines in the matrix and a direction of the scanning lines of the matrix is changed,

wherein the second output circuit inhibits the output of the shift data, based on which the selection signal is output, to the first shift register, when the number of lines between the line for reading out an image signal and the line for clearing an image signal is more than the total number of lines in the matrix.

4. (Currently amended) The image-processing device according to ~~claim 1~~ claim 3, further comprising:

a third output circuit that outputs a reset signal to the second shift register when a direction of scanning lines of the matrix is changed.

5. (Currently amended) ~~The image processing device according to claim 1,~~
An image processing device that reads an image signal from a solid-state image-pickup element where a plurality of unit pixels including a transistor for detecting a light signal and a photo diode are arranged in a matrix, the device comprising:

a first shift register connected to a line of the matrix for reading out an image signal, the first shift register selecting a line where a signal in response to carriers accumulated in an accumulation state for generating carriers in the photo diode in response to received light is read out;

a second shift register connected to a line for clearing an image signal, the second shift register selecting a line for clearing an image signal where residual carriers in the solid-state image-pickup element are discharged from the solid-state image-pickup element;

a first output circuit that outputs a reset signal to the first shift register when a direction of scanning lines of the matrix is changed;

a second output circuit that outputs shift data applied to a line for reading out an image signal, based on which a selection signal for selecting a line for reading out an image signal is output, to the first shift register, when a number of lines between the line for reading out an image signal and the line for clearing an image signal is equal to or less than a total number of lines in the matrix and a direction of the scanning lines of the matrix is changed,

wherein the second output circuit outputs the selection signal when generating an interlacing frame according to frame rate.

6-7. (cancelled)

8. (new) The image-processing device according to claim 5, further comprising:

a third output circuit that outputs a reset signal to the second shift register when a direction of scanning lines of the matrix is changed.